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REMARKS

Applicants would like to thank the Examiner for permitting an interview on October 7, 2003 to discuss the subject application. During that call, the Examiner suggested that Applicants amend Claim 12 by deleting the phrase "or tissue;" cancel Claim 15; and amend Claim 37 to recite "an isolated or recombinant nucleic acid encoding a polypeptide consisting of any 26 amino acid fragment...". The Examiner indicated the claims would be in a condition for allowance if these amendments were made.

STATUS OF CLAIMS

Claim 15 has been canceled. Claims 12, 14, 17, 18, 19, 23, 24, 37, and 41 have been amended for greater clarity and consistency. Support for these claim amendments may be found throughout the specification and the originally filed claims. For example, support for "26 amino acid fragment" can be found in the specification, for example on page 14, line 14. No new matter has been added by these claim amendments.

REJECTIONS UNDER 35 U.S.C. § 101

Claims 15, 17-19, and 41 stand rejected under 35 U.S.C. § 101, as allegedly being directed to non-statutory subject matter for encompassing a naturally occurring product.

Claims 17-19 and 41 have been amended so that they are directed to <u>isolated or</u> recombinant nucleic acids. Claims 14, 23, and 24 have similarly been amended for greater clarity and consistency. Such isolated or recombinant nucleic acids are not naturally occurring but require intervention from "the hand of man." Consequently, such nucleic acids fall within the realm of patentable subject matter. In light of the aforementioned amendments, Applicants respectfully request withdrawal of this 35 U.S.C. § 101 rejection.

Claims 11-15, 17-19, 23-27, and 37-41 stand rejected under 35 U.S.C. § 101, as allegedly lacking a specific and substantial asserted utility or a well established utility.

The pending claims are directed to nucleic acids encoding a 7 transmembrane polypeptide BLRx and fragments thereof. The specification shows that BLRx nucleic acid is differentially expressed in skin that is normal and that is undergoing early wound healing (12 hours postwound). [See the specification, for example, on page 73, lines 14-33 and in Figure 7.] The claimed nucleic acids thus have value as probes which may be used to distinguish between cells that are normal and those that are undergoing wound healing.

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In light of the above, Applicants believe that the specification supports the utility of the present claims and respectfully request withdrawal of this 35 U.S.C. § 101 rejection.

REJECTIONS UNDER 35 U.S.C. § 112, first paragraph

Claims 11-15, 17-19, 23-27, and 37-41 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking a substantial asserted utility or a well established utility. In other words, it has been allegedly that one skilled in the art would not know how to use the claimed invention.

As noted above, Applicants point out that the specification discusses the utility of BLRx nucleic acids as probes for distinguishing skin that is normal from that undergoing wound healing. Applicants contend that the specification provides sufficient support for how to use the present invention, for example, on page 59, line 18 to page 60, line 17.

Based on the substantial asserted utility and the guidance on how to use the present invention, Applicants respectfully request withdrawal of this 35 U.S.C. § 112, first paragraph rejection.

REJECTIONS UNDER 35 U.S.C. § 112, first paragraph

Claim 37 stands rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Claim 37 has been amended to read as follows:

An isolated or recombinant nucleic acid encoding a polypeptide consisting of any 26 amino acid fragment of the amino acid sequence set forth in SEQ ID NO: 8.

Notably, the fragment length has been amended from "27" to "26." Literal support for the number 26 can be found in the specification, for example, on page 14, line 14.

In light of this claim amendment, Applicants respectfully request withdrawal of this 35 U.S.C. § 112, first paragraph rejection.

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Claims 37-40 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking enablement.

As amended, Claim 37 (from which Claims 38-40 depend) is directed to a nucleic acid encoding any 26 amino acid fragment of the amino acid sequence set forth in SEQ ID NO: 8. Applicants contend that one of skill in the art could readily make all the different possible nucleic acids that encode such a 26 amino acid fragment. As noted above, support for how to use the present invention can be found throughout specification, for example, on page 59, line 18 to page 60, line 17.

In light of this claim amendment and arguments, Applicants believe the enablement requirement is met and respectfully request withdrawal of this 35 U.S.C. § 112, first paragraph rejection.

Claims 37-40 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking sufficient written description to reasonably convey to one skilled in the art, that at the time the application was filed, the inventors had possession of the claimed invention.

As amended, Claim 37 (from which Claims 38-40 depend) is directed to a nucleic acid encoding any 26 amino acid fragment of the amino acid sequence set forth in SEQ ID NO: 8. At the time the application was filed, one of skill in the art could readily recognize all the different possible nucleic acids that encode such a 26 amino acid fragment. As such, Applicants contend that it is not necessary to list these nucleic acids in the specification to comply with the written description requirement.

In light of this claim amendment and arguments, Applicants believe the written description requirement is met and respectfully request withdrawal of this 35 U.S.C. § 112, first paragraph rejection.

REJECTIONS UNDER 35 U.S.C. § 112, second paragraph

Claims 15, 18, 19, and 37-41 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Claim 15 (from which Claims 18, 19, and 41 depend) has been canceled. Claims 18, 19, and 41 have been amended so that they now depend on Claim 17.

Claim 37 (from which Claims 38-40 depend) has been amended so that it recites "a polypeptide" rather than "an polypeptide."

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Applicants believe the above amendments render the present claims clear to a skilled artisan and respectfully request withdrawal of this 35 U.S.C. § 112 rejection.

CONCLUSION

Applicants believe that the foregoing amendments and arguments place this application now in condition for allowance. Early and favorable action allowing pending claims 11-14, 17-19, 23-27, and 37-41 is respectfully solicited.

Respectfully submitted,

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